



# technical data

**FBQ-B7**



**Concealed Ceiling, Inverter  
Controlled Unit**

air conditioning systems

# Split Sky Air

# Split - Sky Air



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment



Daikin units comply with the European regulations that guarantee the safety of the product.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

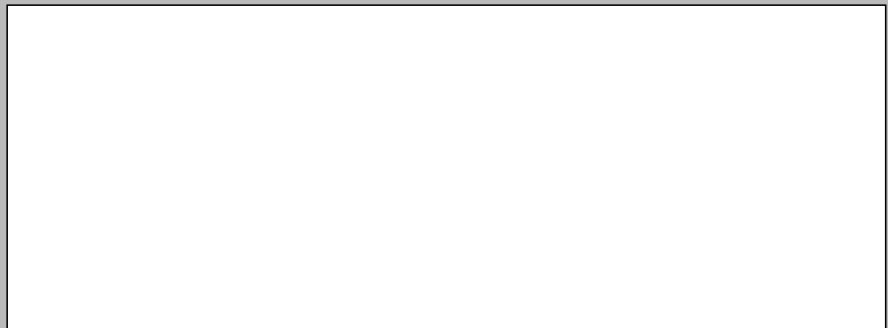


Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

Specifications are subject to change without prior notice.

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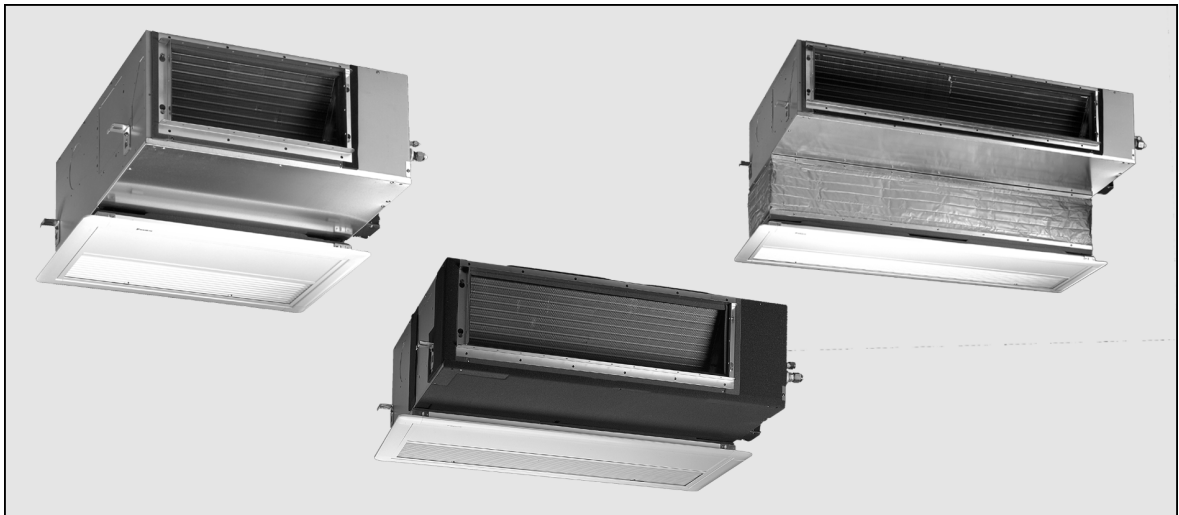
\* For capacity tables, please refer to part II: outdoor units



# 1 Features

1

- Lightweight and compact
- Blends unobtrusively with any interior décor
- Fits flush into each ceiling
- Extremely quiet in operation both indoors and outdoors
- The position of the individual air discharge grilles can be altered, enabling a uniform temperature, even in irregularly shaped rooms: L-shaped room, U-shaped room, long room
- Up to 4 indoor units can be connected to 1 Multi outdoor unit. All indoor units are individually controllable with remote control and do not need to be installed in the same room.
- Daikin remote controls give you easy control at your fingertips.
- The wired remote control provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- The optional remote ON/OFF enables you to start/stop the air conditioning from a mobile phone via a telephone remote control (field supply).
- The optional forced OFF enables you to switch off the unit automatically. E.g. when a window is opened, the unit switches off.
- The 'home leave' operation button prevents large temperature differences by continuously operating at a minimum (heating mode) or maximum (cooling mode) preset level while you're out or sleeping. It also allows the indoor temperature to return quickly to your favourite comfort level.



Optional



2 steps



Standard



## 2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1
NOMINAL INPUT	Cooling	kW	-	-	-
	Heating	kW	-	-	-

For combination indoor + outdoor units (air cooled):								
INDOOR UNITS			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	FBQ50B7V1	FBQ60B7V1	
OUTDOOR UNITS			RKS35DVMB	RKS50BVMB9	RKS60BVMB9	RS50BVMB	RS60BVMB	
CAPACITY (3)	Cooling (1)	min.-nom.-max.	kW	3.40 (nom.)	0.90~5.00~5.60	0.90~5.70~7.00	5.00 (nom.)	5.70 (nom.)
NOMINAL INPUT	Cooling	nominal	kW	1.21	1.92	2.19	1.92	2.19
EER				2.81	2.60	2.60	2.60	2.60
ENERGY LABEL	Cooling			C	E	E	E	E
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	605	960	1,095	960	1,095

For combination indoor + outdoor units (air cooled):						
INDOOR UNITS			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	
OUTDOOR UNITS			RXS35DVMB	RXS50BVMB	RXS60BVMB	
CAPACITY (3)	Cooling (1)	min.-nom.-max.	kW	3.40 (nom.)	0.90~5.00~5.60	0.90~5.70~6.00
	Heating (2)	min.-nom.-max.	kW	4.10 (nom.)	0.90~6.00~7.00	0.90~7.00~8.00
NOMINAL INPUT	Cooling	nominal	kW	1.21	1.92	2.19
	Heating	nominal	kW	1.28	1.87	2.50
EER				2.81	2.60	2.60
COP				3.20	3.21	2.80
ENERGY LABEL	Cooling			C	E	E
	Heating			C	C	E
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	605	960	1,095

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	
DIMENSIONS	Unit	H	mm	300		
		W	mm	700	1000	
		D	mm	800		
WEIGHT	Unit		kg	30	31	41
MATERIAL	Unit	Galvanised steel plate				
SOUND LEVEL	Sound pressure (cooling/heating) (1)	high	dB(A)	33/33		34/34
		low	dB(A)	29/29		30/30
	Sound power		dB(A)	52/52	53/53	60/60
FAN	Air flow rate (cooling/heating)	high	m <sup>3</sup> /min	11.5/11.5	14/14	19/19
		low	m <sup>3</sup> /min	9/9	10/10	14/14
	Speed	steps	2 steps			
	Type	Sirocco fan				
	Qty x motor output	W	1 x 65	1 x 85	1 x 125	
	Drive	Direct drive				
HEAT EXCHANGER	External static pressure (H-M-L)	Pa	88 - 49 - 20			
	Type	Fin rhombus type, $\phi$ 7 Hi-XA tube				
	Rows x stages x fin pitch	mm	3 x 14 x 1.75			
AIR FILTER	Face area	m <sup>2</sup>	0.132		0.221	
	Resin net (with mold resistant)					
PIPING CONNECTIONS	liquid	gas	mm	$\phi$ 6.35		
		drain I.D.	mm	$\phi$ 9.52	$\phi$ 12.7	
		drain O.D.	mm	$\phi$ 25		
		drain O.D.	mm	$\phi$ 32		
INSULATION MATERIAL	Heat insulation	Both liquid and gas pipes				
	Sound absorbing insulation	Flame and heat resistant foamed polyethylene, regular foamed polyethylene and foamed PU				

For outdoor units only:	Pair application	See chapters RS-B + RKS-D/B + RXS-D/B
	Multi model application	See chapters MKS-D, MXS-D, RMXS-D

- Information is not available.

## 2 Specifications



2

NOMINAL CAPACITY and NOMINAL INPUT						
For indoor units only:						
INDOOR UNITS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
NOMINAL INPUT	Cooling		kW	-	-	-
	Heating		kW	-	-	-

For combination indoor + outdoor units (air cooled):						
INDOOR UNITS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
OUTDOOR UNITS				RR71B7V3B/RR71B7W1B	RR100B7V3B/RR100B7W1B	RR125B7W1B
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.1	10	12.2
NOMINAL INPUT	Cooling	nominal	kW	2.79/2.68	3.79/3.60	4.67
EER				2.54/2.65	2.64/2.78	2.61
ENERGY LABEL	Cooling			D/E	D/E	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,395/1,340	1,895/1,800	2,335
INDOOR UNITS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
OUTDOOR UNITS				RQ71B7V3B/RQ71B7W1B	RQ100B7V3B/RQ100B7W1B	RQ125B7W1B
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.1	10	12.2
	Heating (2)	nominal	kW	8	11.2	14.5
NOMINAL INPUT	Cooling	nominal	kW	2.79/2.68	3.79/3.60	4.67
	Heating	nominal	kW	2.49	3.91/3.87	4.52
EER				2.54/2.65	2.64/2.78	2.61
COP				3.21	2.86/2.89	3.21
ENERGY LABEL	Cooling			D/E	D/C	D
	Heating			C	D/D	C
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,395/1,340	1,885/1,780	2,335
INDOOR UNITS				FBQ71B7V3B*	FBQ100B7V3B*	FBQ125B7V3B*
OUTDOOR UNITS				REQ71B7V3B/REQ71B7W1B	REQ100B7V3B/REQ100B7W1B	REQ125B7W1B
CAPACITY (3)	Cooling (1)	nominal	kW	7.1	9.8	12.2
	Heating (2)	nominal	kW	8	11.2	14.5
NOMINAL INPUT	Cooling	nominal	kW	2.79/2.68	3.98/3.94	4.67
	Heating	nominal	kW	2.49	3.99/3.96	4.52
EER				2.54/2.65	2.46/2.49	2.61
COP				3.21	2.86/2.89	3.21
ENERGY LABEL	Cooling			E/D	E/E	D
	Heating			C	D/D	C
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,395	1,990	2,335
INDOOR UNITS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
OUTDOOR UNITS				RZQ71B8V3B	RZQ100B8V3B/B7W1B	RZQ125B8V3B/B7W1B
CAPACITY (3)	Cooling (1)	nominal	kW	7.10	10.00	12.50
	Heating (2)	nominal	kW	8.00	11.20	14.00
NOMINAL INPUT	Cooling	nominal	kW	2.44	2.86	3.98
	Heating	nominal	kW	2.09	3.00	3.99
EER				<del>3.32</del>	3.50	3.14
COP				3.83	3.73	3.51
ENERGY LABEL	Cooling			A	A	B
	Heating			A	A	B
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	<del>1,070</del>	1,430	1,990

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- Information is not available.

\* Combination only available in Portugal, Cyprus, Greece and Malta.

## 2 Specifications



2

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
DIMENSIONS	Unit	H	mm	300		
		W	mm	1,000	1,400	
		D	mm	800		
WEIGHT	Unit	kg		41	51	52
MATERIAL	Unit Galvanised steel plate					
SOUND LEVEL	Sound pressure (cooling/heating) (3)	high	dB(A)	34/34	36/36	38/38
		low	dB(A)	30/30	31/31	32/32
	Sound power (cooling) (4)	high	dB(A)	60	62	63
FAN	Air flow rate (cooling/heating)	high	m <sup>3</sup> /min	19/19	27/27	35/35
		low	m <sup>3</sup> /min	14/14	20/20	24/24
	Speed	steps		3 steps		
	Type	Sirocco fan				
	Qty x motor output	W		1 x 125	1 x 135	1 x 225
	Drive	Direct drive				
	External static pressure (H-M-L)	Pa		86 - 48 - 20	86 - 48	
HEAT EXCHANGER	Type	Fin rhombus type, $\phi$ 7 Hi-XSS tube				
	Rows x stages x fin pitch	mm		3 x 14 x 1.75		
	Face area	m <sup>2</sup>		0.221	0.338	
AIR FILTER	Resin net (with mold resistant)					
PIPING CONNECTIONS		liquid	mm	$\phi$ 9.52 (flare)		
		gas	mm	$\phi$ 15.9 (flare)		
		drain I.D.	mm	$\phi$ 25 (VP25)		
		drain O.D.	mm	$\phi$ 32 (VP25)		
INSULATION MATERIAL	Heat insulation		Both liquid and gas pipes			
For outdoor units only:	Pair / Twin / Triple / Double twin application			See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B		

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- Information is not available.

\* Combination only available in Portugal, Cyprus, Greece and Malta.

ELECTRICAL SPECIFICATIONS						
For indoor units only:						
				FBQ35B7V1	FBQ50B7V1	FBQ60B7V1
CURRENT	Nominal running current	cooling/heating	A	0.5	0.7	0.9
	Maximum running current	cooling/heating	A	See chapters RS-B + RKS-D/B + RXS-D/B		
For combination indoor units + outdoor units:				FBQ35B7V1 RKS35DVMB	FBQ50B7V1 RKS50BVMB9	FBQ60B7V1 RKS60BVMB9
CURRENT	Nominal running current	cooling	A	See chapter RKS-D/B		See chapter RS-B
	Maximum running current	cooling	A	See chapter RKS-D/B		See chapter RS-B
	Starting current	cooling	A	See chapter RKS-D/B		See chapter RS-B
For combination indoor units + outdoor units:				FBQ35B7V1 RXS35DVMB	FBQ50B7V1 RXS50BVMB	FBQ60B7V1 RXS60BVMB
CURRENT	Nominal running current	cooling/heating	A	See chapter RXS-D/B		
	Maximum running current	cooling/heating	A	See chapter RXS-D/B		
	Starting current	cooling/heating	A	See chapter RXS-D/B		
For indoor units only:				FBQ35B7V1	FBQ50B7V1	FBQ60B7V1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency	Hz		50	50	50
	Voltage	V		230	230	230

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3TW25121-1  
3TW25131-1

## 2 Specifications



### 2

ELECTRICAL SPECIFICATIONS				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
<b>For indoor units only:</b>						
CURRENT	Nominal running current	cooling/heating	A	See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B		
	Maximum running current	cooling/heating	A	See chapter RR-B7, RQ-B7, REQ-B7, RZQ-B		
<b>For combination indoor + outdoor units (air cooled):</b>				FBQ71B7V3B RR71B7V3B/RR71B7W1B	FBQ100B7V3B RR100B7V3B/RR100B7W1B	FBQ125B7V3B RR125B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RR-B7		
	Maximum running current	cooling	A	See chapter RR-B7		
	Starting current	cooling	A	See chapter RR-B7		
<b>For combination indoor + outdoor units (air cooled):</b>				FBQ71B7V3B RQ71B7V3B/RQ71B7W1B	FBQ100B7V3B RQ100B7V3B/RQ100B7W1B	FBQ125B7V3B RQ125B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RQ-B7		
	Maximum running current	cooling	A	See chapter RQ-B7		
	Starting current	cooling	A	See chapter RQ-B7		
<b>For combination indoor + outdoor units (air cooled):</b>				FBQ71B7V3B REQ71B7V3B/REQ71B7W1B	FBQ100B7V3B REQ100B7V3B/REQ100B7W1B	FBQ125B7V3B REQ125B7W1B
CURRENT	Nominal running current	cooling	A	See chapter REQ-B7		
	Maximum running current	cooling	A	See chapter REQ-B7		
	Starting current	cooling	A	See chapter REQ-B7		
<b>For combination indoor + outdoor units (air cooled):</b>				FBQ71B7V3B RZQ71B8V3B	FBQ100B7V3B RZQ100B8V3B/B7W1B	FBQ125B7V3B RZQ125B8V3B/B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RZQ-B		
	Maximum running current	cooling	A	See chapter RZQ-B		
	Starting current	cooling	A	See chapter RZQ-B		
<b>For indoor units only:</b>				FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
POWER SUPPLY				V3	V3	V3
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency	Hz		50	50	50
	Voltage	V		230	230	230

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### NOTES

- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB \* outdoor temperature 35°CDB \* refrigerant piping length: 7.5m \* level difference: 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB \* outdoor temperature: 7°CDB/6°CWB \* refrigerant piping length: 7.5m \* level difference 0m.
- Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- The sound pressure level is measured at 1.5m distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
- The sound power level is an absolute value indicating the "power" which a sound source generates.
- Energy label: scale from A (most efficient) to G (less efficient).
- Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)

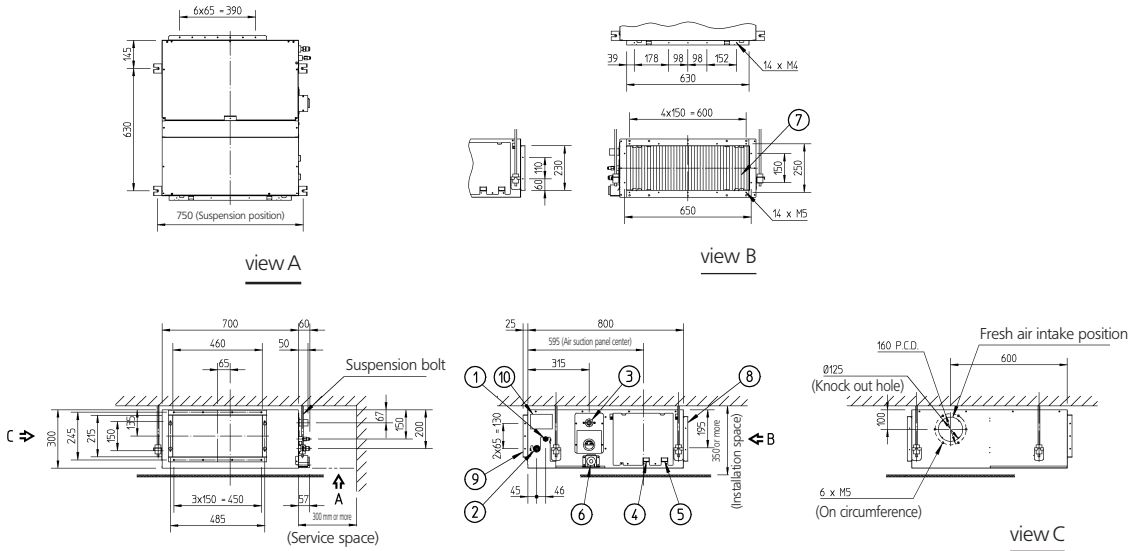




# 3 Dimensional drawings

3

## FBQ35-50B7



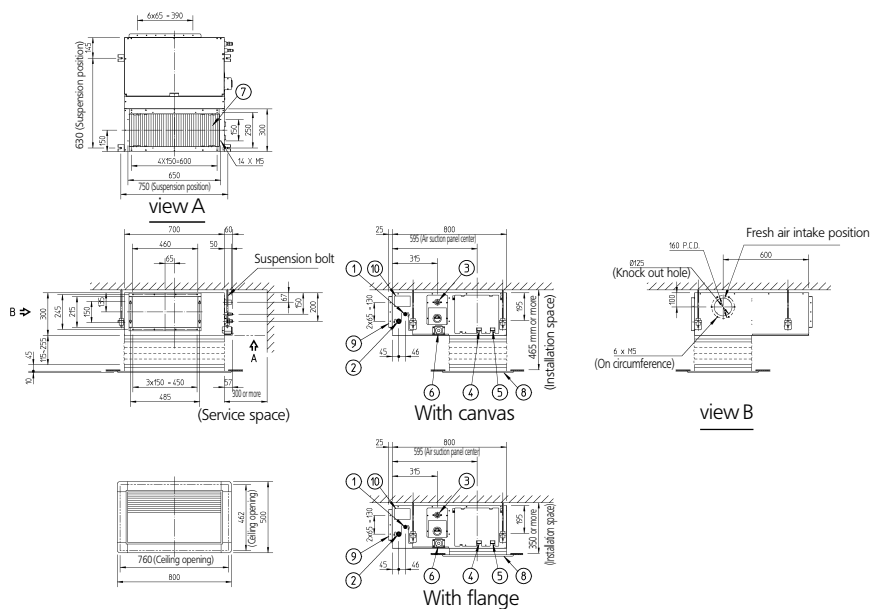
**Notes:**  
 1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.  
 2. The required ceiling depth varies according to configuration of the specific system.  
 3. For maintenance of the air filter, it is necessary to provide a service access panel according to the installation method. (Refer to the 'filter installation method' drawing)

- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ35	6.35	9.52
FBQ50	6.35	12.70

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## FBQ35-50B7 With canvas

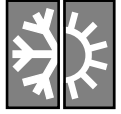


**Notes:**  
 1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.  
 2. Optional decoration panel: BYBS45DJW1 (Light ivory white 10Y9/0.5)  
 3. The required ceiling depth varies according to configuration of the specific system

- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ35	6.35	9.52
FBQ50	6.35	12.70

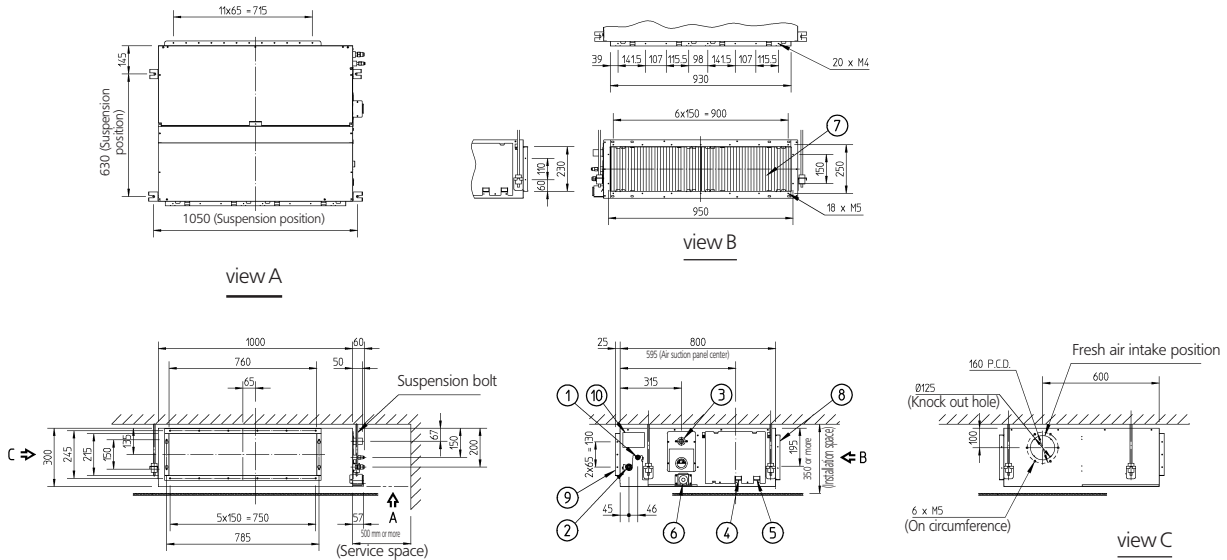
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# 3 Dimensional drawings

3

## FBQ60-71B7



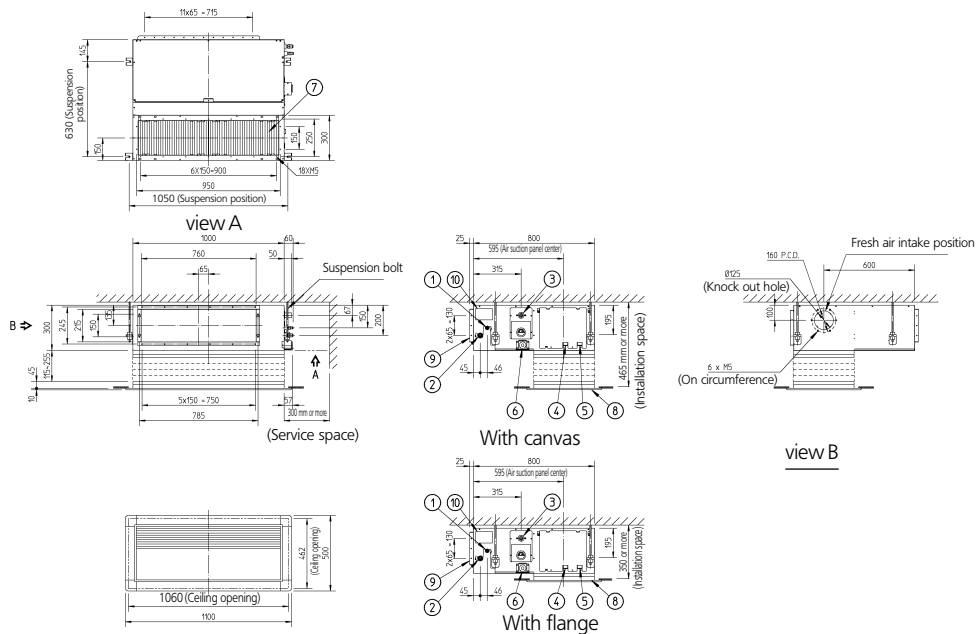
**Notes:**  
 1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.  
 2. The required ceiling depth varies according to configuration of the specific system.  
 3. For maintenance of the air filter, it is necessary to provide a service access panel according to the installation method. (Refer to the 'filter installation method' drawing)

- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ60	6.35	12.70
FBQ71	9.52	15.90

3TW22244-1D

## FBQ60-71B7 With canvas

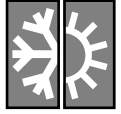


**Notes:**  
 1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.  
 2. Optional decoration panel: BYBS125DJW1 (Light ivory white 10Y9/0.5)  
 3. The required ceiling depth varies according to configuration of the specific system

- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ60	6.35	12.70
FBQ71	9.52	15.90

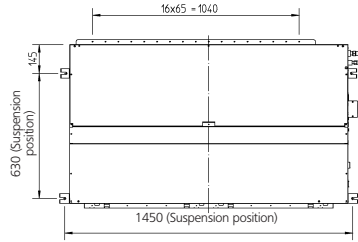
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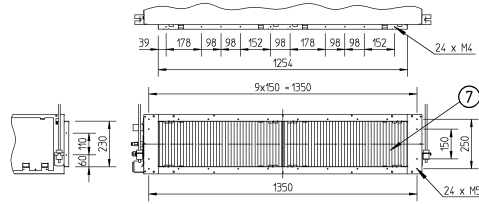
# 3 Dimensional drawings

3

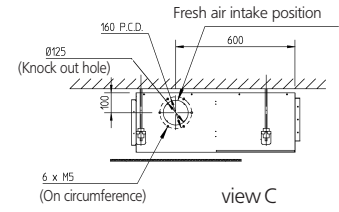
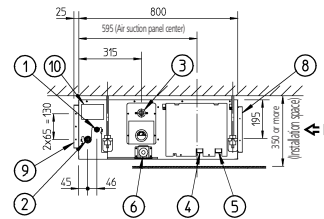
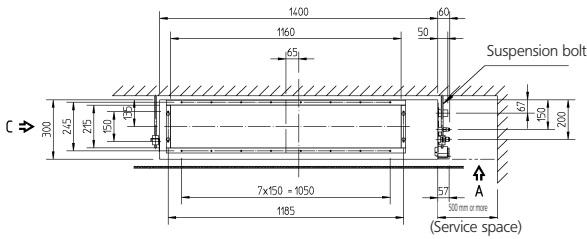
## FBQ100-125B7



view A



view B



view C

**Notes:**

1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
2. The required ceiling depth varies according to configuration of the specific system.
3. For maintenance of the air filter, it is necessary to provide a service access panel according to the installation method. (Refer to the 'filter installation method' drawing)

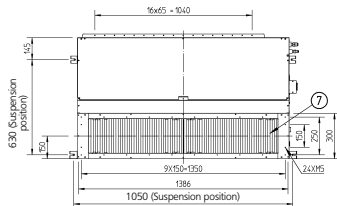
- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ100	9.52	15.90
FBQ125	9.52	15.90

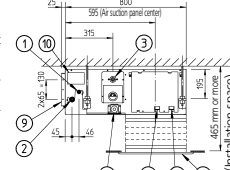
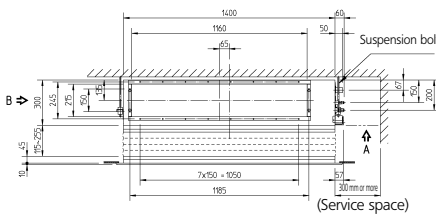
3TW22254-1C

## FBQ100-125B7

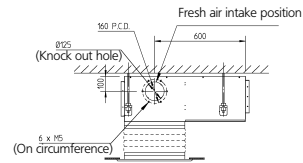
### With canvas



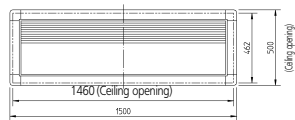
view A



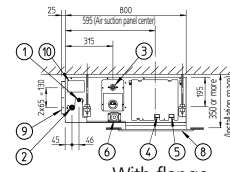
With canvas



view B



With flange



**Notes:**

1. Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
2. Optional decoration panel: BYBS12SD/W1 (Light ivory white 10Y9/0.5)
3. The required ceiling depth varies according to configuration of the specific system

- 1 Liquid pipe connection  $\phi$  A Flare connection
- 2 Gas pipe connection  $\phi$  B Flare connection
- 3 Drain pipe connection VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (I.D.  $\phi$  32, I.D.  $\phi$  25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FBQ100	9.52	15.90
FBQ125	9.52	15.90

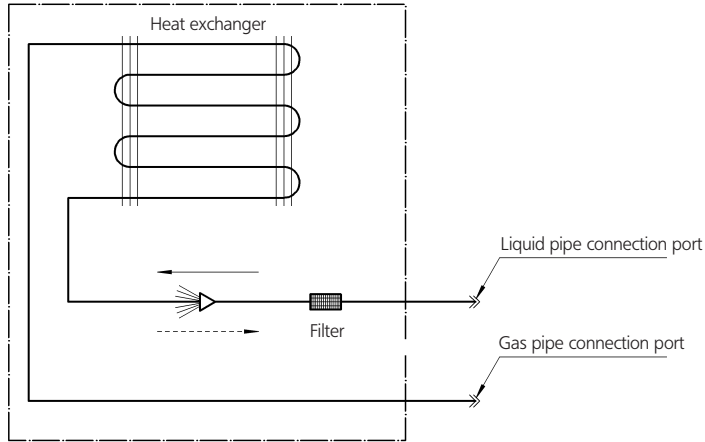
3TW22254-2C



# 4 Piping diagrams

4

FBQ-B7



Refrigerant flow

Cooling

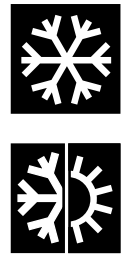
Heating

Refrigerant pipe connection port diameters

Model	Gas	Liquid
FBQ35B	φ 9.52	φ 6.35
FBQ50-60B	φ 12.70	φ 6.35
FBQ71-100-125B	φ 15.90	φ 9.52

Check valve  
 Flare connection  
 Screw connection  
 Flange connection  
 Pinched pipe  
 Spinned pipe

3TW20435-1J



# 5 Wiring diagrams

5

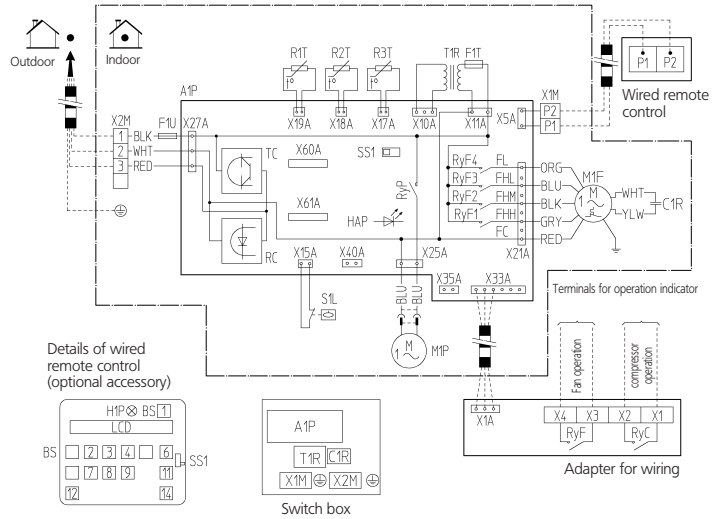
## FBQ35-60B7

**Notes**

- When using the central remote control, see manual for connection to the unit.
- The infrared remote control model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.

- Field wiring
- Terminal
- Connector
- Wire clamp
- Protective earth (screw)

Colours  
 BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



- S1L Float switch
- A1P Printed circuit board
- T1R Power supply transformer (transformer 220-240V/218V)
- C1R Capacitor (fan)
- F1U Fuse (5A, 250V)
- F1T Thermal fuse (152°C) (M1F embedded)
- HAP Light emitting diode (service monitor green)
- M1F Motor (fan)
- M1P Motor (drain pump)

- R1T Thermistor (air)
- R2T Thermistor (liquid)
- R3T Thermistor (coil)
- RyF1-4 Magnetic relay (fan)
- RyP Magnetic relay (drain pump)
- SS1 Selector switch (emergency)
- X1M Terminal strip
- X2M Terminal strip
- RC Signal receiver circuit
- TC Signal transmission circuit

- Wired remote control
- B51 On/Off button
- B52 Timer mode start/stop button
- B53, B58 Programming time button
- B54, B59 Temperature setting button
- B56 Operation mode selector button
- B57 Timer on/off button
- B511 Fan speed control button
- B512 Inspection/test button

- B514 Filter sign reset button
- H1P Light emitting diode (service monitor red)
- LCD Liquid crystal display
- SS1 Selector switch (main/sub)

- Adapter for wiring
- RyC, RyF Magnetic relay
- Connector for optional parts
- X60A, X61A Connector (interface adapter for sky air series)
- X33A Connector (adapter for wiring)
- X35A Connector (group control adapter)
- X40A Connector (remote ON/OFF forced Off)

2TW25116-1B

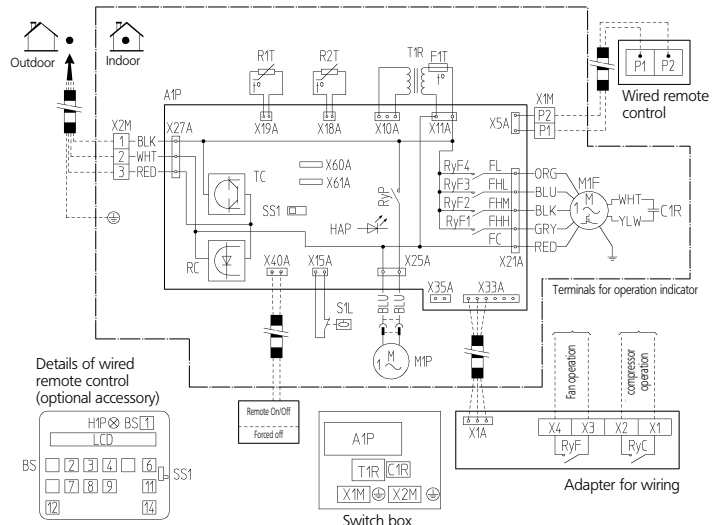
## FBQ71B7

**Notes**

- When using the central remote control, see manual for connection to the unit.
- The infrared remote control model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.

- Field wiring
- Terminal
- Connector
- Wire clamp
- Protective earth (screw)

Colours  
 BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



- S1L Float switch
- A1P Printed circuit board
- T1R Power supply transformer (transformer 220-240V/218V)
- C1R Capacitor (fan)
- F1T Thermal fuse (152°C) (M1F embedded)
- HAP Light emitting diode (service monitor green)
- M1F Motor (fan)
- M1P Motor (drain pump)

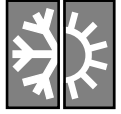
- R1T Thermistor (air)
- R2T Thermistor (coil)
- R3T Thermistor (liquid)
- RyF1-4 Magnetic relay (fan)
- RyP Magnetic relay (drain pump)
- SS1 Selector switch (emergency)
- X1M Terminal strip
- X2M Terminal strip
- RC Signal receiver circuit
- TC Signal transmission circuit

- Wired remote control
- B51 On/Off button
- B52 Timer mode start/stop button
- B53, B58 Programming time button
- B54, B59 Temperature setting button
- B56 Operation mode selector button
- B57 Timer on/off button
- B511 Fan speed control button
- B512 Inspection/test operation button

- B514 Filter sign reset button
- H1P Light emitting diode (service monitor red)
- LCD Liquid crystal display
- SS1 Selector switch (main/sub)

- Adapter for wiring
- RyC, RyF Magnetic relay
- Connector for optional parts
- X60A, X61A Connector (interface adapter for sky air series)
- X33A Connector (adapter for wiring)
- X35A Connector (group control adapter)
- X40A Connector (remote ON/OFF, forced off, only SKY-AIR Passeries)

2TW26026-1A



# 5 Wiring diagrams

5

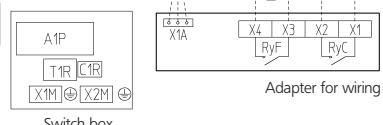
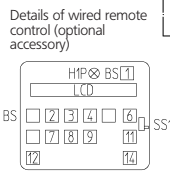
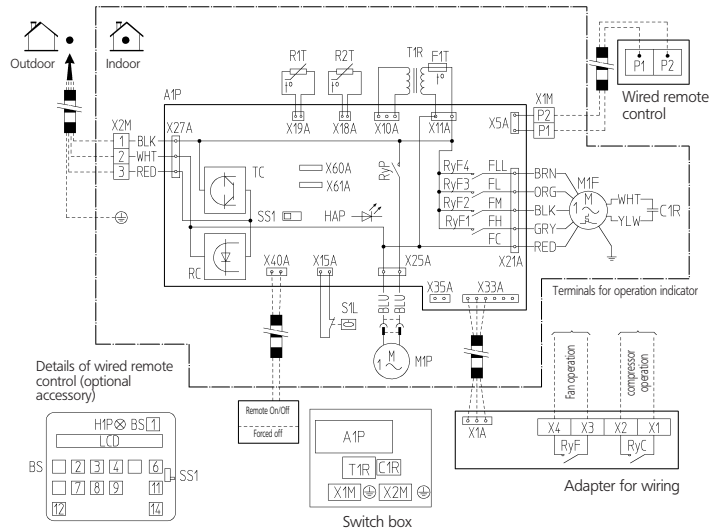
## FBQ100-125B7

**Notes**

1. When using the central remote control, see manual for connection to the unit.
2. The infrared remote control model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.

- Field wiring
- Terminal
- Connector
- Wire clamp
- Protective earth (screw)

Colours  
 BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



S1L	Floet switch	R1T	Thermistor (air)	Wired remote control	BS14	Filter sign reset button	Adapter for wiring
A1P	Printed circuit board	R2T	Thermistor (coil)	B51	On/Off button	H1P	RvC/RvF Magnetic relay
T1R	Power supply transformer (transformer 220-240V/218V)	RvF1-4	Magnetic relay (fan)	B52	Timer mode start/stop button	LCD	Connector for optional parts
C1R	Capacitor (fan)	RvP	Magnetic relay (drain pump)	B53,B58	Programming time button	SS1	Connector (interface adapter for sky air series)
F1T	Thermal fuse (152°C) (M1F embedded)	SS1	Selector switch (emergency)	B54,B59	Temperature setting button		X33A Connector (adapter for wiring)
HAP	Light emitting diode (service monitor green)	X2M	Terminal strip	B56	Operation mode selector button		X35A Connector (group control adapter)
M1F	Motor (fan)	RC	Signal receiver circuit	B57	Timer on/off button		X40A Connector (remote ON/OFF, forced off, only SKY-AR Pasesies)
M1P	Motor (drain pump)	TC	Signal transmission circuit	B511	Fan speed control button		
				B512	Inspection/test operation button		

2TW26056-1A



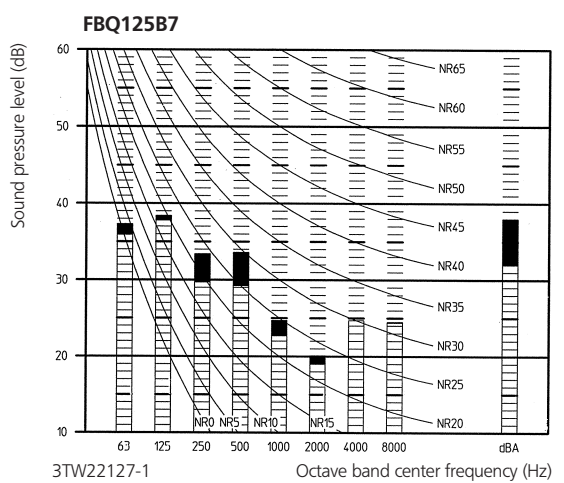
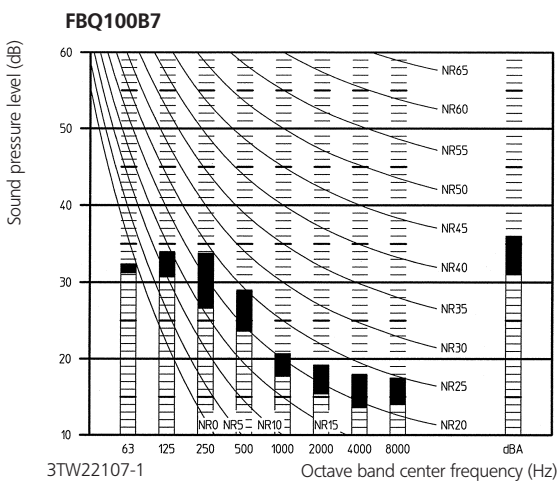
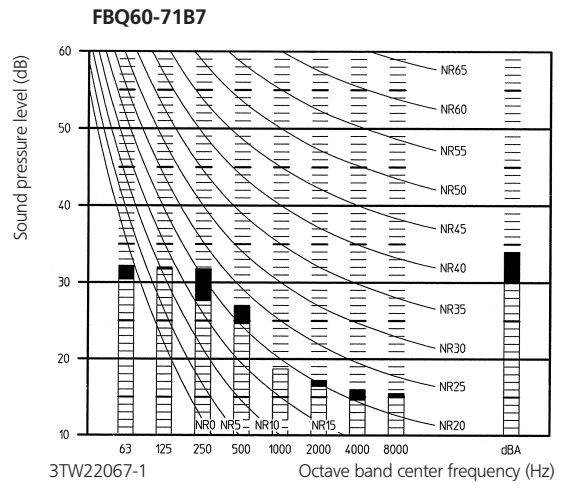
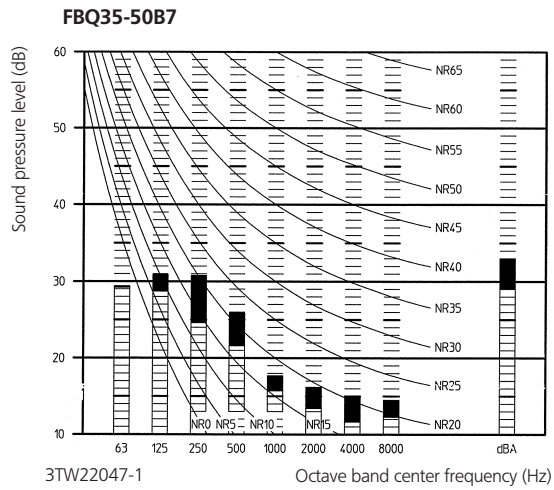
# 6 Sound level

## 6-1 Sound level data

6  
6-1

Model	Sound pressure level		Measuring location	Sound power level (H) (cooling/heating)
	230V, 50Hz			
	Cooling/Heating			
	H	L		
FBQ35B7V1	33/33	29/29		52/52
FBQ50B7V1	33/33	29/29		53/53
FBQ60B7V1	34/34	30/30		60/60
FBQ71B7V3B	34/34	30/30		60/-
FBQ100B7V3B	36/36	31/31		62/-
FBQ125B7V3B	38/38	32/32		63/-

## 6-2 Sound pressure spectrum



**NOTES**

- 1 Data is valid at free field condition
- 2 Operation sound levels are valid at nominal operation condition 230V
- 3 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20Pa

**Legend**

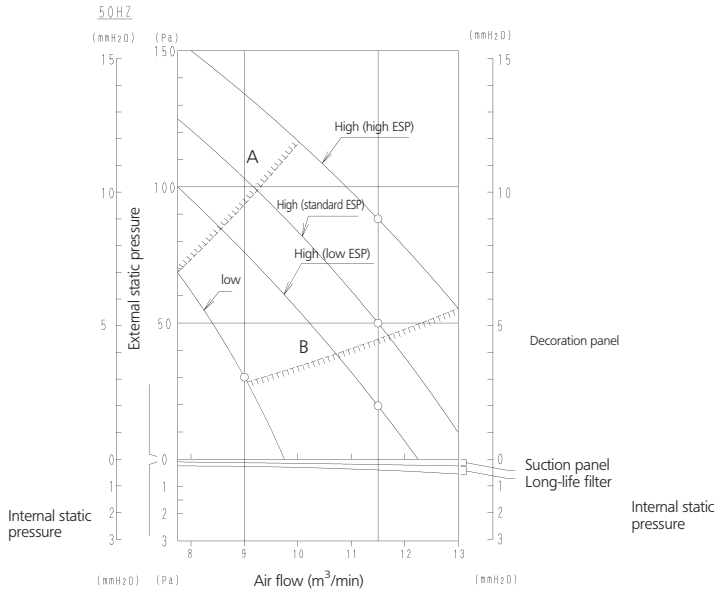
- High speed
- Low speed



# 7 Fan characteristics

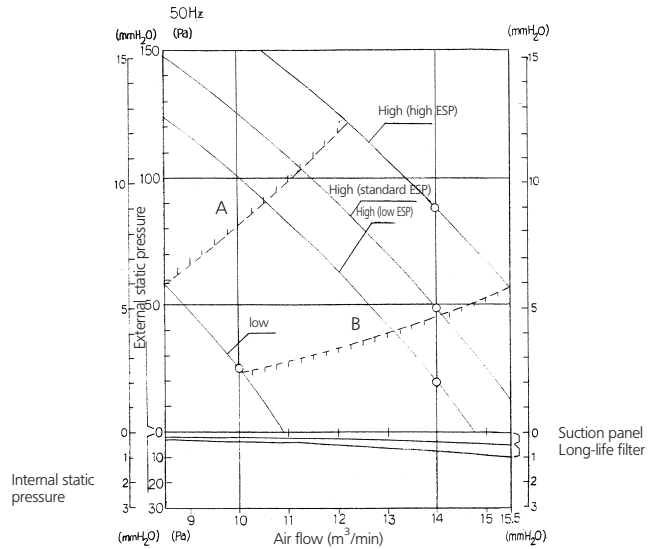
## 7 Cooling only

FBQ35B7



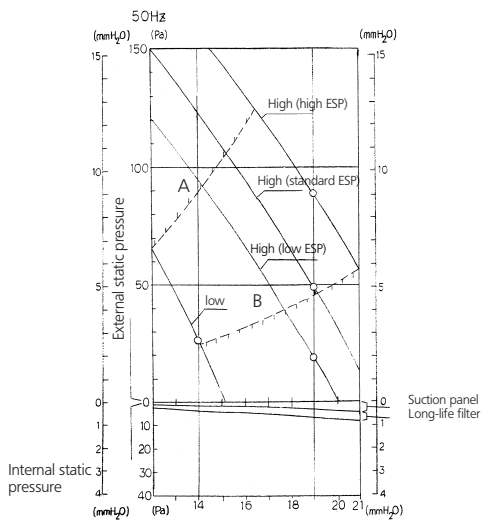
DU220-411C

FBQ50B7



DU220-412A

FBQ60-71B7



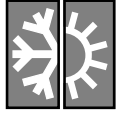
DU220-413A

### NOTES

1. The wired remote control can be used to switch between 'high' and 'low'
2. The air flow is set to 'standard' before leaving the factory. It is possible to switch between 'standard EPS' an 'high 'EPS' by programming on the remote control.
3. The internal static pressure indicates the characteristics of the fan when a suction panel (optional accessory) and a canvas for the suction panel (optional accessory) are incorporated into the main unit (with a long-life filter).

A = Upper limit of external static pressure (high ESP)  
 B = Lower limit of external static pressure (high ESP)

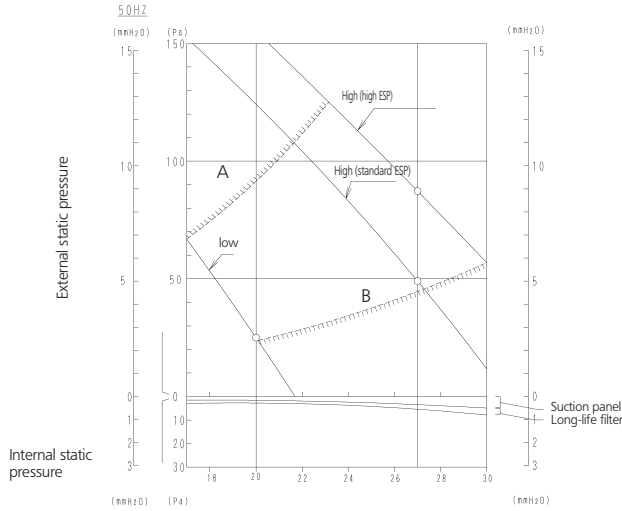




# 7 Fan characteristics

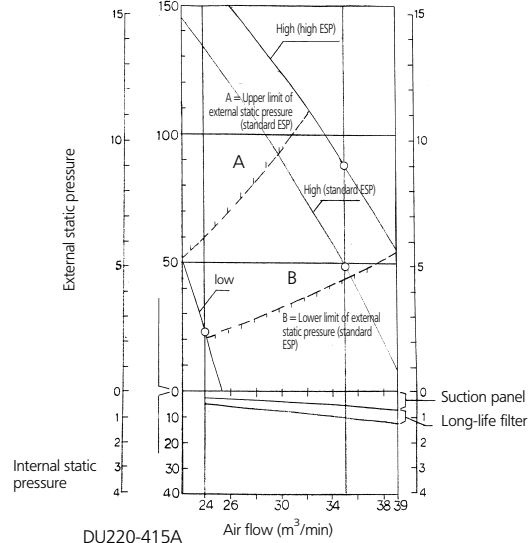
7

**FBQ100B7**



DU220-414C

**FBQ125B7**



DU220-415A

## NOTES

1. The wired remote control can be used to switch between 'high' and 'low'
2. The air flow is set to 'standard' before leaving the factory.  
It is possible to switch between 'standard EPS' an 'high 'EPS' by programming on the remote control.
3. The internal static pressure indicates the characteristics of the fan when a suction panel (optional accessory) and a canvas for the suction panel (optional accessory) are incorporated into the main unit (with a long-life filter).

A = Upper limit of external static pressure (high ESP)  
B = Lower limit of external static pressure (high ESP)











# 8 Accessories

## 8-1 Standard accessories

**8** Check if the following accessories are included with your unit.

8-1

 Clamp 1 pc.	Also used as packing material  Paper pattern for installation 1 pc.	 Drain hose 1 pc.
Insulation for fitting 1 of each  For gas pipe		 For liquid pipe  Washer for hanging bracket 8 pcs.
FBQ35-50: 8pcs. FBQ60: 12pcs.  Screws for duct flanges 1 set		 Infrared 6 pcs.



# 8 Accessories

## 8-2 Optional accessories

### FBQ-B7

8

8-2

Nr	Item	FBQ35,50	FBQ60,71	FBQ100,125	
1	Panel related	Decoration panel	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1
		Service access panel	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
2	Filter related	High-efficiency filter 65% (colorimetric method) *1	KAFJ252L56	KAFJ252L80	KAFJ252L160
		High-efficiency filter 90% (colorimetric method) *1	KAFJ253L56	KAFJ253L80	KAFJ253L160
		Filter chamber for bottom suction	KAJ25L56D	KAJ25L80D	KAJ25L160D
		Filter chamber for rear suction	KAJ25L56B	KAJ25L80B	KAJ25L160B
3	Air inlet and air discharge outlet related	Air suction canvas	KSA-25K56	KSA-25K80	KSA-25K160
		Blind board/screening door	KBBJ25K56	KBBJ25K80	KBBJ25K160
		Air discharge adapter for round duct	KDAJ25K56	KDAJ25K71	KDAJ25K140

Nr	Item	Type	FBQ35,50	FBQ60,71	FBQ100,125
1	Remote control	Wired type		BRC1D527	
2	Central remote control			DCS302C51	
3	Unified ON/OFF control			DCS301B51	
4	Schedule timer			DST301B51	
5	Adapter for wiring (interlock for fresh air intake fan)			KRP1B54	
6	Wiring adaptor for electrical appendices			KRP4A51	
7	Interface adapter for Sky Air series			DTA112B51	
8	Remote ON/OFF, forced OFF			EKRORO	
9	Option PCB for external electrical heater, humidifier and/or hour meter *2			EKRP1B2	

3TW25119-1C

\*1 If installing a high efficiency filter on the unit, an assembly chamber for either bottom or rear suction is required.

\*2 Electrical heater, humidifier and hour meter are field supply. These parts should not be installed inside the equipment. (Refer to installation manual EKRP1B2).



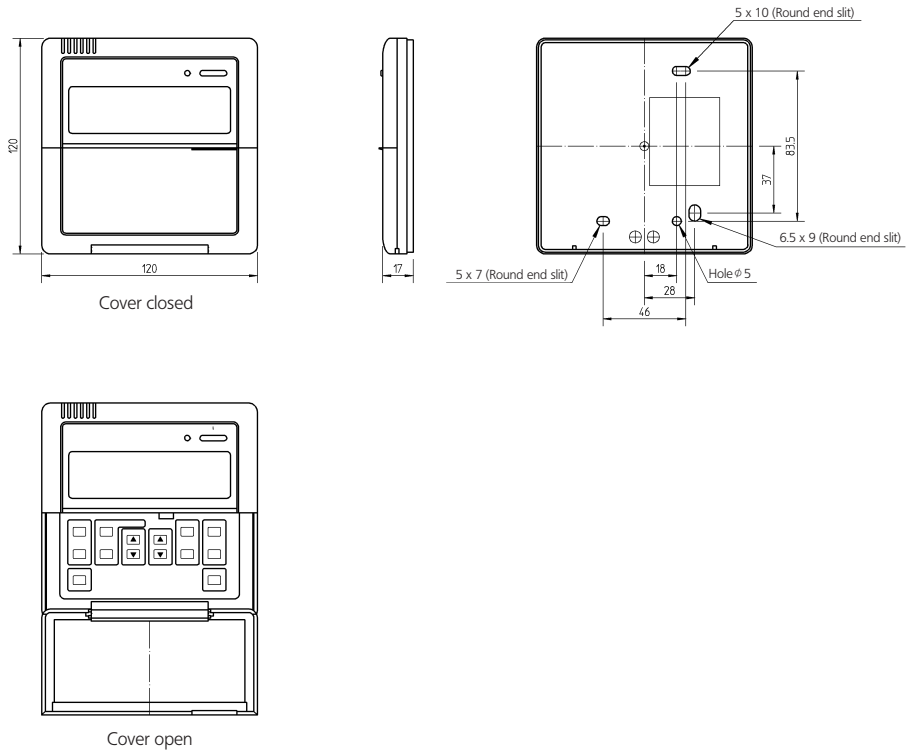
# 9 Control systems

## 9-1 Wired remote control

9

9-1

BRC1D527

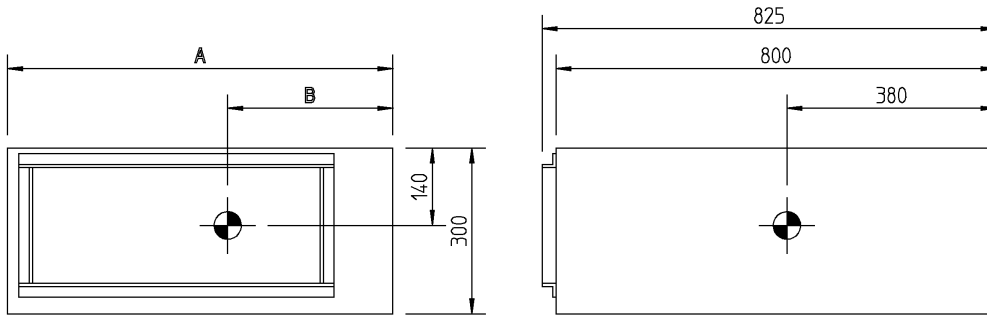


3TW23651-2



# 10 Center of gravity

FBQ-B7



Model	A	B
FBQ35,50	700	300
FBQ60	1,000	460
FBQ71	1,000	460
FBQ100,125	1,400	640

4TW20169-2F

# 11 Safety device settings

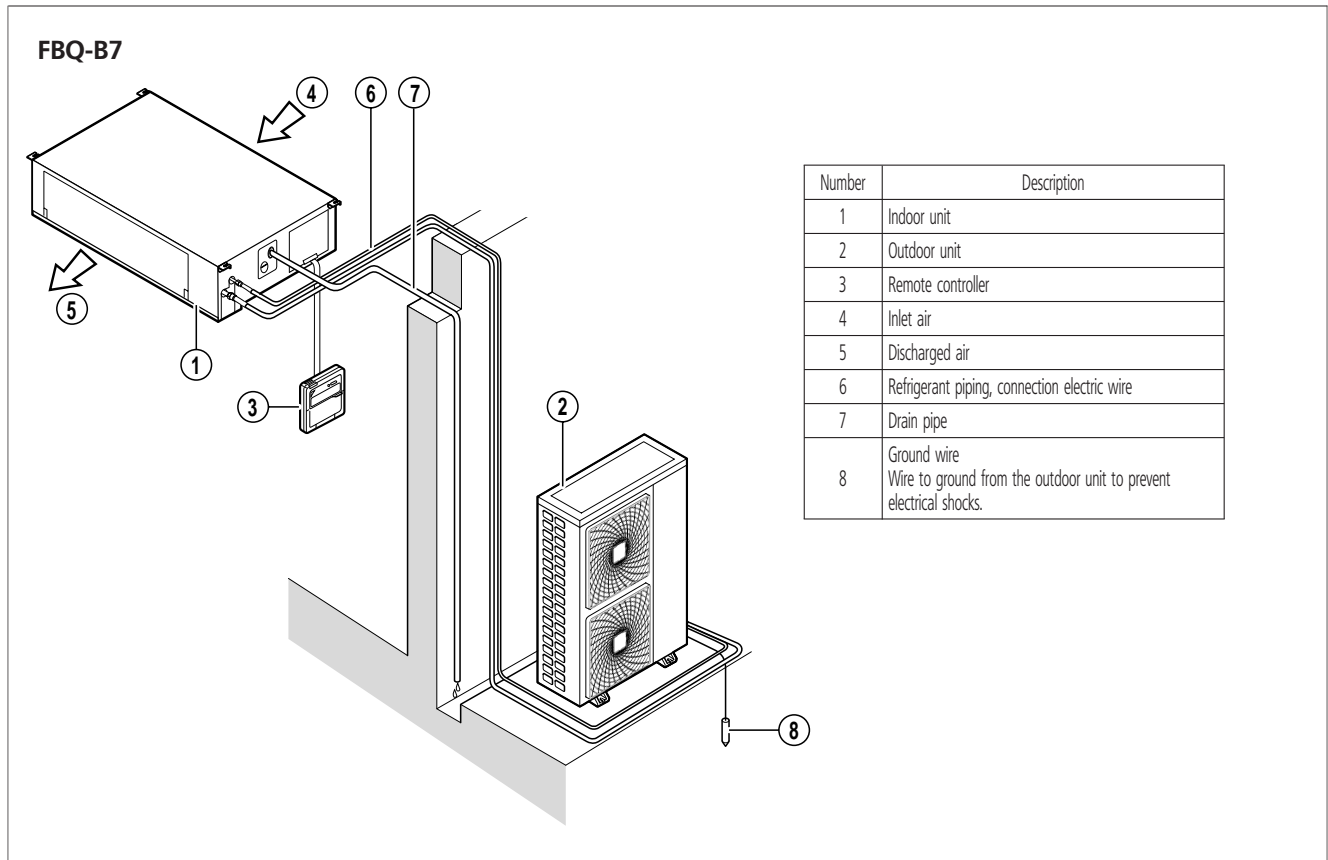
Model	Safety devices	35	50	60	71	100	125
FBQ~B	Fuse	5A/250V	5A/250V	5A/250V	—	—	—
	Fan motor thermal fuse (°C)	152±2	152±2	152±2	152±2	152±2	152±2
	Fan motor thermal protector (°C)	—	—	—	—	—	—

3TW21009-2E



# 12 Installation

## 12



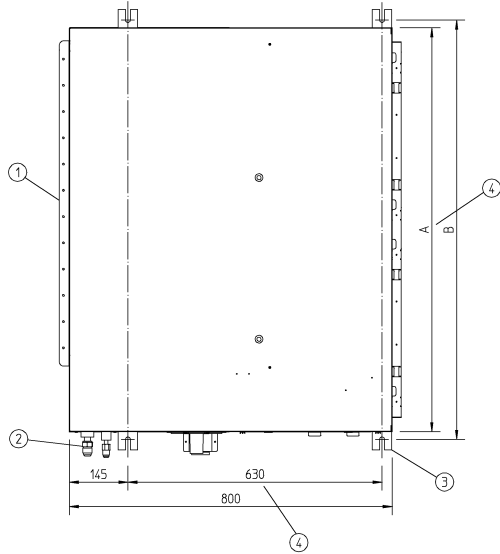


# 12 Installation

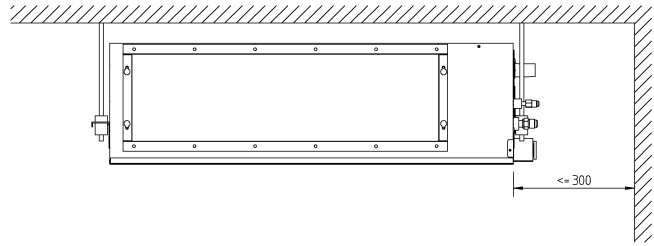
## 12-1 Filter installation method

**12**  
12-1

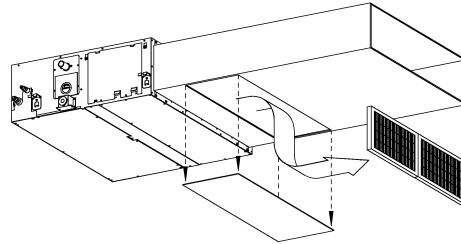
FBQ-B7



Suspension bolt pitch

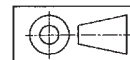


Service space



Number	Description
1	Indoor unit
2	Pipe connections
3	Suspension bolt pitch (4x)
4	Suspension bolt pitch distance

Unit	A	B
FBQ35,50	700	750
FBQ60	1000	1050



3TW22043-6A



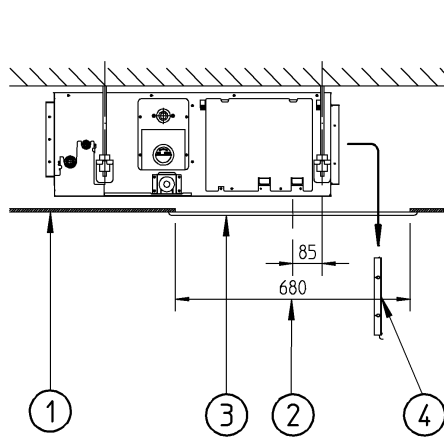
# 12 Installation

## 12-1 Filter installation method

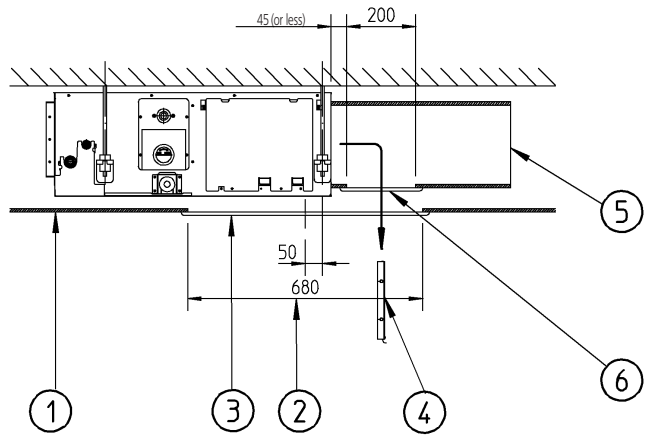
12

12-1

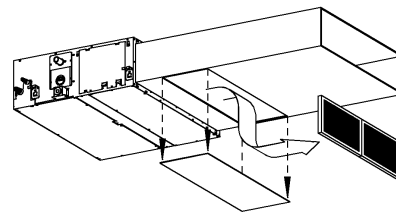
FBQ-B7



Installation without duct



Installation with duct

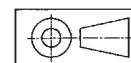


Number	Description
1	False ceiling
2	Ceiling opening
3	Service access panel (optional)
4	Air filter
5	Air inlet duct
6	Duct service opening

### NOTES

- When installing the unit with rear suction, a service opening is necessary for the maintenance of the air filters.
- When installing the unit with a suction duct, a service opening must be provided in the duct.
- An optional service access panel is available:

Model	Service access panel
FBQ35,50	KTBJ25K56W
FBQ60,71	KTBJ25K80W
FBQ100,125	KTBJ25K160W



3TW22044-3B



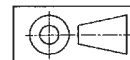
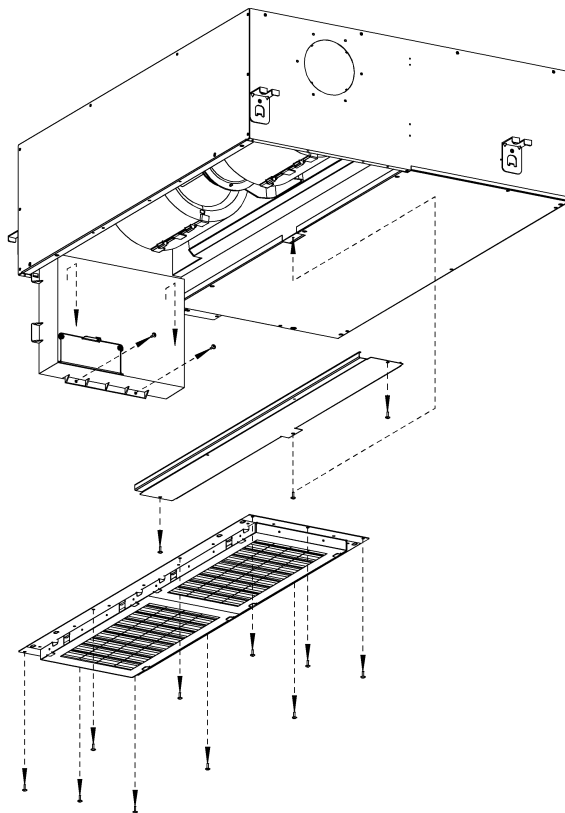
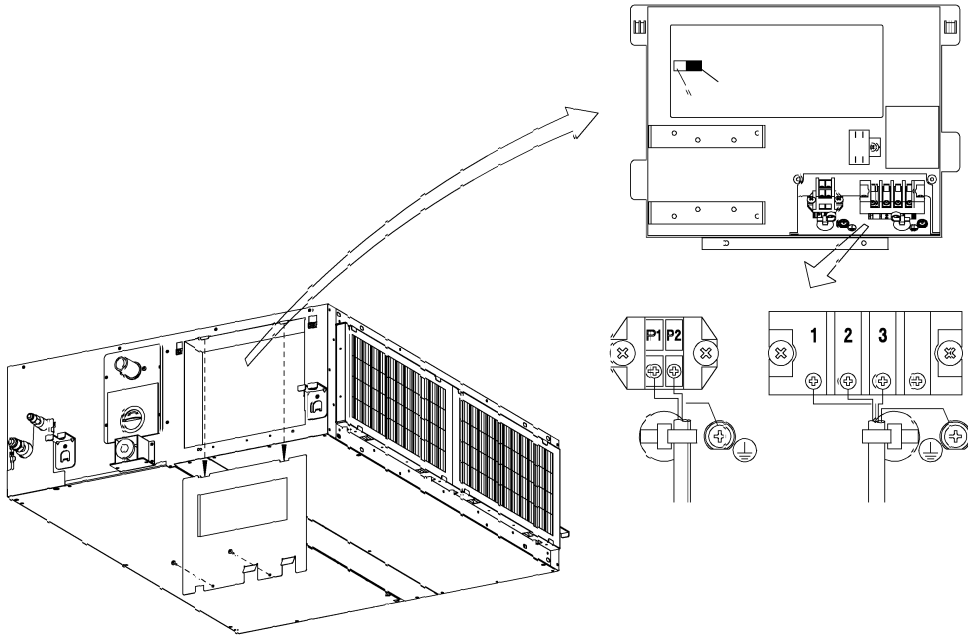


# 12 Installation

## 12-2 Switch box connections

12  
12-2

FBQ-B7



3TW22043-5A